

A CONTRIBUTION TO THE KNOWLEDGE OF THE TRANSVAAL PASSIFLORACEAE.

By Mrs. R. POTT, Botanist of the Transvaal Museum.

Trypsohemma arenophilum Pott, sp. nov.
(*Trypsohemma*—*Basananthe*.)

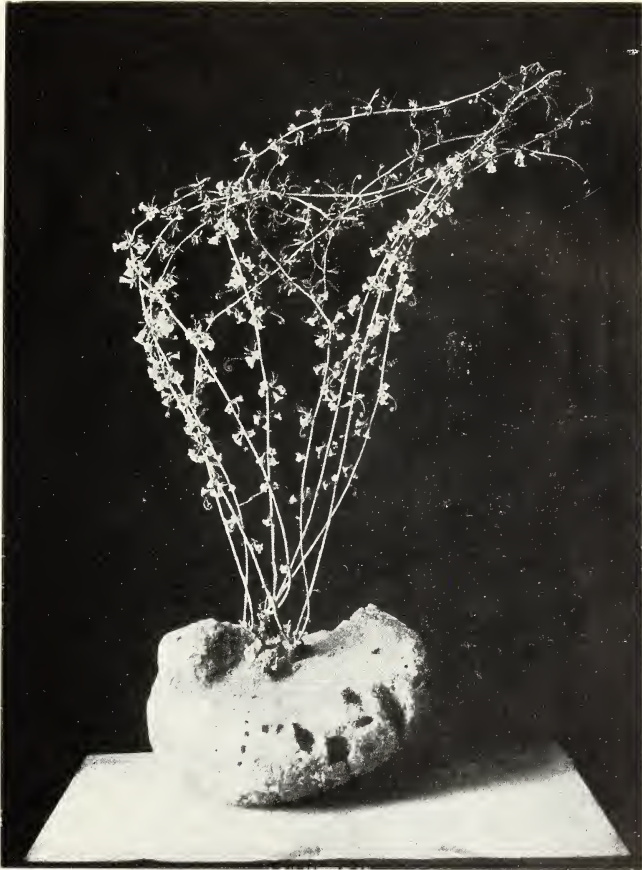
HERBA annua, humilis, erecta. Radix gracilis, longa. Caulis glaber, angulatus, basi ramosus. Folia alterna, petiolata, tripartita, glabra, margine serrato, serraturis apice glandulosis, subtus nervis prominentibus; lobus medius anguste lanceolatus, lobis lateralibus longior; lobi laterales bipartiti, lobulis lanceolatis. Stipulae filamentosae, petiolo longiores. Pedunculi axillares, ecirrhosi, quam petioli duplo longiores, 2-floribus; bracteae foliosae, breviter petiolatae, bilobae, lobis ovatis, acuminatis; bracteoli 4, filamentosi, pedicellis longiores. Flores oppositi, minuti, pedicellati, virido-albi; sepala 5, glabra, oblonga, obtusa, alba, nervis tribus, crassis, viridibus; petala oblonga-lanceolata, sepalis \pm aequilonga, alba; corona exterior gamophylla, breviter cylindracea, ore longe fimbriata; corona interior hyalina; stamina 5, petalis breviores, filamentis linearibus, faciei interiori coronae interioris adnatis. Ovarium viride cum stylopodio flavo, crasso; styli 3, elongati; stigmata capitata. Fructus glaber, ovoideus, pericarpio chartaceo, flavo. Semen 1, testa luteo-alba, foveolata.

Dwarf annual herb, 4 in. high, branched at the base; branches spreading, 2 in. long. Root long, thin, unbranched. Stem erect, glabrous, angular; internodes very short, \pm 2 lin. long. Leaves alternate, petiolate, glabrous, tripartite; middle lobe simple, the side-lobes bipartite, all the lobes narrowly-lanceolate, sharply serrate, each tooth tipped with a gland; middle lobe longest, \pm 1½ in. long, 2 lin. broad in the middle; veins very prominent at the underside of the leaf; petiole short, 2 lin. long; stipules threadlike, longer than petiole. Peduncles in axils of leaves, twice as long as petiole, with 2 opposite, pedicellate flowers at the top, not ending in a tendril; bracts leaflike, shortly stalked, two-lobed, lobes oblong, long acuminate; bracteoles threadlike, longer than pedicels. Flowers minute \pm 1 lin. long, greenish-white; sepals oblong, whitish with 3 prominent green nerves; petals oblong-lanceolate, white, a little shorter than sepals; outer corona gamophyllous, short cylindrical, long fringed; inner corona hyalin, shorter than outer one; stamens included, the filaments attached to the inner face of the hyalin corona; ovary green with a yellowish stylopodium; styles longish, 3; stigmata capitate. Fruit ovate, 5 lin. long with a yellowish, papery pericarp, one-seeded. Seed kidney-shaped, 3 lin. long, whitish, pitted.

Grows in sandy soil; collected at Warmbaths, January, 1909. Miss R. Leendertz; No. 2062. The type is in the Herbarium of the Transvaal Museum, Pretoria.

Adenia multiflora Pott, sp. nov.

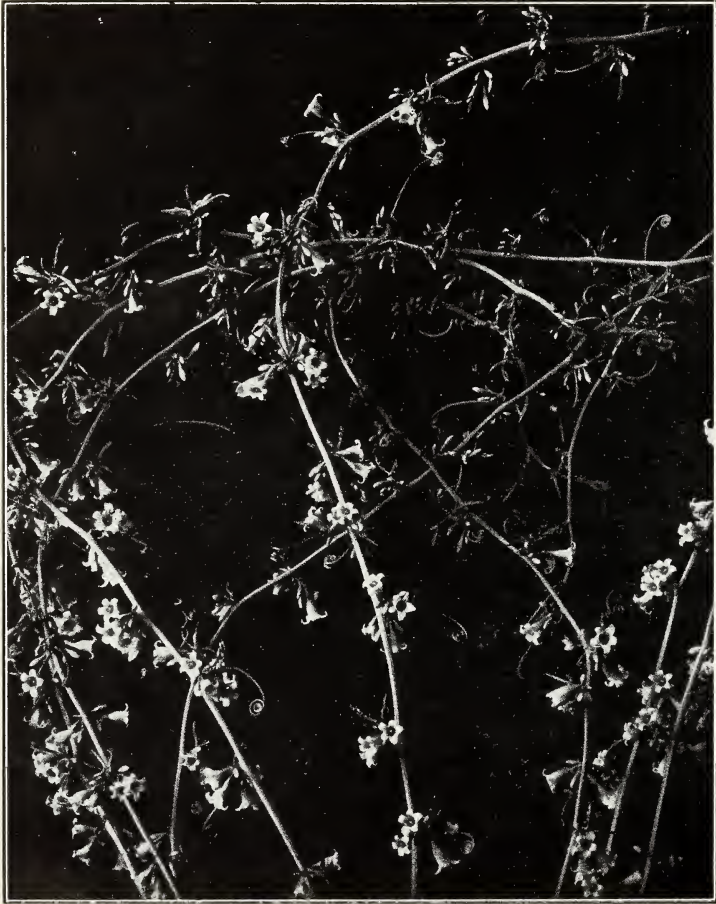
Planta perennis, glabra, scandens, multicaulis. Tuber napiformis, 61 cm. diam., 30 cm. alta. Caules ramosi, teretes, virides, striis purpureis picti, ± 1.5 m. longi, ± 7 cm. diam.; internodia ± 5 cm. longa. Folia alterna, petiolata; petiolus 8–11 mm. longus, sulcatus; lamina ± 4 cm. longa, digitato-partita, glabra, perviridis, lobis 5, nervo medio prominente, margine crasso, rubro; lobus medius longissimus, pinnato-lobatus,



lobulis 4; lobi laterales lobulis 2; lobi basales integri; glanduli 2, magni, ad basin laminae supra, glandulus 1 inter lobo ad basin laminae subtusi glanduli minores inter axilla lobulorum. Flores odoriferi, dioecii; inflorescentia foliis longior, in cirrhum simplicem exiens; cymae ramosae, prope sessiles, ± 20 floribus; bractae minutae, purpureae. Flores σ : receptaculum infundi-buliforme, basi attenuatum, virido-flavum, limbo albo, ± 2.5 cm. longum; segmenta calycis 5, ovata, repanda, apice recurvo, inaequaliter lata, 4–8 mm., tria margine fimbriata; petala 5, alba, versus basin receptaculi inserta, spatulata, acuminata, apice fimbriata, tubo

calycis exserta; coronae filamentis brevibus composita; effigurationes receptaculi 5, basi eius insertae, minutae, lingulatae, sepalis oppositae; stamina 5, inclusa, filamentis parte majore in tubum connatis; antherae oblongae, graciles, ad apice connatis; rudimentum ovarii in tubum filamentorum. Flores ♀ ignoti.

Perennial, glabrous plant, climbing with tendrils. Tuber large, napiform, 2 ft. in diameter and 1 ft. high. Stems many, branched, herbaceous, green, mottled with pale red, up to 5 ft. long, \pm 3 lines in diameter,



internodes; \pm 2 in. long. Leaves alternate, petiolate; petiole 3-4 lin. long, sulcate; lamina triangular in outline \pm 1½ in. long, digitately divided nearly to the base into 5 lobes, glabrous, dark-green, with prominent midrib and thickened, reddish margin; middle lobe longest, pinnatifid with 2 pairs of bluntish segments and roundish angles, the lateral lobes have one pair of segments and the basal ones are undivided; two big flat glands at base of lamina on the upper side, one gland between each lobe on the underside, smaller ones in the angles of each segment of lobes.

Flowers sweetly-scented, dioecious, in nearly sessile, many-flowered cymes in the axils of the leaves; inflorescence dense, up to twenty flowers in the cyme, ending in a simple tendril, much longer than the leaf; bracts minute, reddish. ♂ Flowers: calyx funnel-shaped, tapering at base, slightly irregular, greenish-yellow with cream-coloured limb, \pm 1 in. long, limb 5-cleft, segments ovate, spreading with reflexed tips, differently broad, $1\frac{1}{2}$ –3 lin., three of them fringed at the margin; petals cream-coloured, inserted low down in the calyx-tube, spatulate, much acuminate, fringed at the tip, longer than calyx-tube; corona composed of a fringe of short hairs, inserted at same height with petals; discus of 5 small, lingulate squamae, inserted in the calyx-tube beneath the petals and alternate with them; stamens 5, included, filaments connate into a tube for more than half their length, anthers oblong, slender, connate at their tips; rudimentary ovary concealed in the tube of the filaments. ♀ Flowers unknown.

The enormous tuber of the above-described new species of *Adenia* was found by Dr. J. M. Fehrson at Baviaanspoort near Pretoria in September, 1913, and presented to the Herbarium of the Transvaal Museum. The tuber grows partially above the ground between the rocks and looks with its grey, leathery skin like a piece of rock itself. It is very heavy, full of sap, and green beneath the skin. It was placed in a very sunny spot on the window-sill in the Herbarium and soon it started to grow, making long shoots and flowering for the first time in February, 1914. It never got a drop of water, and again in October of the same year it made long shoots and flowered profusely, as can be seen by the photo taken at that time. The flowers are very sweetly-scented, and hundreds being open at the same time the plant makes a fine show, but it only lasts for a few days.

The Kaffirs know that the tuber contains much sap for in case of thirst and absence of water they cut a piece out of the tuber and suck the sap.

The type is in the Herbarium of the Transvaal Museum.
